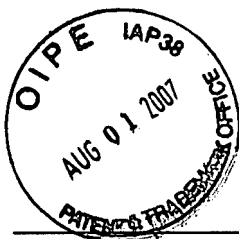


IPN/2834



**REVOCATION OF PRIOR POWERS OF ATTORNEY
APPOINTMENT OF NEW POWERS OF ATTORNEY
AND
CHANGE OF CORRESPONDENCE ADDRESS**

in re

Applicant/Patent Owner: **SIEMENS VDO AUTOMOTIVE CORPORATION**

Application No.: 09/683,018

Filing Date: 11/8/2001

Publication No.: 2002-0089244

Publication Date: 7/11/2002

Patent No.: 6744158

Issue Date: 6/1/2004

Entitled: Electric machine With Cooling Rings

Siemens VDO Automotive Corporation, a Delaware corporation, as assignee of the entire right, title, and interest in the patent application/patent identified above by virtue of an assignment averred per the attached Statement Under 37 CFR 3.73(b), hereby:

- a) revokes all previous powers of attorney given in the above-identified application.
- b) appoints all Practitioners associated with the Customer Number: 028524 as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.
- c) requests change the correspondence address for the above-identified application to the address associated with the above-mentioned Customer Number.

19 July 2007

Laura M. Slenzak
Assistant Secretary for Intellectual Property Matters
Siemens VDO Automotive Corporation

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: **SIEMENS VDO AUTOMOTIVE CORPORATION**

Application No.: **09/683,018**

Filing Date: **11/8/2001**

Publication No.: **2002-0089244**

Publication Date: **7/11/2002**

Patent No.: **6744158**

Issue Date: **6/1/2004**



Entitled: **Electric machine With Cooling Rings**

Siemens VDO Automotive Corporation, a Delaware corporation, states that it is: the assignee of the entire right, title, and interest in the patent application/patent identified above by virtue of an assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at **Reel 019077, Frame 0840**, for which a copy thereof is attached.

As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was already submitted for recordation pursuant to 37 CFR 3.11.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

A handwritten signature in black ink, appearing to read "Laura M. Stenzak".

19 July 2007

Laura M. Stenzak
Assistant Secretary for Intellectual Property Matters
Siemens VDO Automotive Corporation



United States Patent and Trademark Office

Patent Assignment Details

NOTE: Results display only for issued patents and published applications. For pending or abandoned applications please consult USPTO staff.

Reel/Frame: 019077/0840

Pages: 7

Recorded: 3/28/2007

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

Total properties: 104

| | | | | | | | | |
|----|---|----------------|-----------|------------|----------------|---------|------------|------------|
| 1 | Patent #: | <u>5402059</u> | Issue Dt: | 3/28/1995 | Application #: | 8193587 | Filing Dt: | 2/8/1994 |
| | Title: SWITCHING POWER SUPPLY OPERATING AT LITTLE OR NO LOAD | | | | | | | |
| 2 | Patent #: | <u>5469351</u> | Issue Dt: | 11/21/1995 | Application #: | 8270967 | Filing Dt: | 7/5/1994 |
| | Title: FAULT ISOLATION IN AN INDUCTION MOTOR CONTROL SYSTEM | | | | | | | |
| 3 | Patent #: | <u>5552977</u> | Issue Dt: | 9/3/1996 | Application #: | 8493221 | Filing Dt: | 6/20/1995 |
| | Title: THREE PHASE INVERTER CIRCUIT WITH IMPROVED TRANSITION FROM SVPWM TO SIX STEP OPERATION | | | | | | | |
| 4 | Patent #: | <u>5627446</u> | Issue Dt: | 5/6/1997 | Application #: | 8498163 | Filing Dt: | 7/5/1995 |
| | Title: INDUCTION MOTOR CONTROL METHOD | | | | | | | |
| 5 | Patent #: | <u>5619435</u> | Issue Dt: | 4/8/1997 | Application #: | 8558950 | Filing Dt: | 11/13/1995 |
| | Title: MACHINE | | | | | | | |
| 6 | Patent #: | <u>5739664</u> | Issue Dt: | 4/14/1998 | Application #: | 8596846 | Filing Dt: | 2/5/1996 |
| | Title: INDUCTION MOTOR DRIVE CONTROLLER | | | | | | | |
| 7 | Patent #: | <u>5754026</u> | Issue Dt: | 5/19/1998 | Application #: | 8825986 | Filing Dt: | 4/4/1997 |
| | Title: INDUCTION MOTOR CONTROL METHOD | | | | | | | |
| 8 | Patent #: | <u>5821720</u> | Issue Dt: | 10/13/1998 | Application #: | 8846442 | Filing Dt: | 4/30/1997 |
| | Title: BACKLASH ELIMINATION IN THE DRIVETRAIN OF AN ELECTRIC VEHICLE | | | | | | | |
| 9 | Patent #: | <u>5994859</u> | Issue Dt: | 11/30/1999 | Application #: | 8848206 | Filing Dt: | 4/30/1997 |
| | Title: TORSIONAL OSCILLATION COMPENSATION IN THE DRIVETRAIN OF A MOTOR VEHICLE | | | | | | | |
| 10 | Patent #: | <u>6072297</u> | Issue Dt: | 6/6/2000 | Application #: | 8926415 | Filing Dt: | 9/9/1997 |
| | Title: VIBRATION DETECTION AND CONTROL FOR A VEHICLE DRIVETRAIN | | | | | | | |
| 11 | Patent #: | <u>6047787</u> | Issue Dt: | 4/11/2000 | Application #: | 9017934 | Filing Dt: | 2/3/1998 |
| | Title: VOLTAGE CONTROL METHOD FOR AN ELECTRIC MOTOR CONTROL SYSTEM | | | | | | | |
| 12 | Patent #: | <u>5977679</u> | Issue Dt: | 11/2/1999 | Application #: | 9034946 | Filing Dt: | 3/5/1998 |
| | Title: POLE-PHASE MODULATED TOROIDAL WINDING FOR AN INDUCTION MACHINE | | | | | | | |
| 13 | Patent #: | <u>5905349</u> | Issue Dt: | 5/18/1999 | Application #: | 9064237 | Filing Dt: | 4/23/1998 |
| | Title: METHOD OF CONTROLLING ELECTRIC MOTOR TORQUE IN AN ELECTRIC VEHICLE | | | | | | | |
| 14 | Patent #: | <u>5965967</u> | Issue Dt: | 10/12/1999 | Application #: | 9110353 | Filing Dt: | 7/6/1998 |
| | Title: ROTOR FOR AN ELECTRICAL MACHINE | | | | | | | |
| 15 | Patent #: | <u>6246343</u> | Issue Dt: | 6/12/2001 | Application #: | 9263303 | Filing Dt: | 3/5/1999 |
| | Title: INCREMENT ENCODER FAILURE DETECTION | | | | | | | |
| 16 | Patent #: | <u>6122588</u> | Issue Dt: | 9/19/2000 | Application #: | 9420465 | Filing Dt: | 10/19/1999 |
| | Title: VEHICLE SPEED CONTROL WITH CONTINUOUSLY VARIABLE BRAKING TORQUE | | | | | | | |
| 17 | Patent #: | <u>6307275</u> | Issue Dt: | 10/23/2001 | Application #: | 9495443 | Filing Dt: | 1/31/2000 |
| | Title: COUPLED TO AN INDUSTRIAL TURBO ENGINE | | | | | | | |
| 18 | Patent #: | <u>6377019</u> | Issue Dt: | 4/23/2002 | Application #: | 9499366 | Filing Dt: | 2/10/2000 |
| | Title: PEAK TORQUE PER AMPERE METHOD FOR INDUCTION MOTOR VECTOR CONTROL | | | | | | | |



United States Patent and Trademark Office

Patent Assignment Details

NOTE: Results display only for issued patents and published applications. For pending or abandoned applications please consult USPTO staff.

Reel/Frame: 019077/0840

Pages: 7

Recorded: 3/28/2007

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

Total properties: 104

| | | | | | | | | |
|----|---|----------------------|-----------|------------|----------------|---------|------------|------------|
| 19 | Patent #: | <u>6239575</u> | Issue Dt: | 5/29/2001 | Application #: | 9502869 | Filing Dt: | 2/11/2000 |
| | Title: Induction motor power/torque clamping for electric vehicle performance | | | | | | | |
| 20 | Patent #: | <u>6330143</u> | Issue Dt: | 12/11/2001 | Application #: | 9512480 | Filing Dt: | 2/23/2000 |
| | Title: Automatic over-current protection of transistors | | | | | | | |
| 21 | Patent #: | <u>6169679</u> | Issue Dt: | 1/2/2001 | Application #: | 9532796 | Filing Dt: | 3/21/2000 |
| | Title: Method and system for synchronizing the phase angles of parallel connected inverters | | | | | | | |
| 22 | Patent #: | <u>6291960</u> | Issue Dt: | 9/18/2001 | Application #: | 9533296 | Filing Dt: | 3/22/2000 |
| | Title: Pulse width modulated motor control system and method for reducing noise vibration and harshness | | | | | | | |
| 23 | Patent #: | <u>6327524</u> | Issue Dt: | 12/4/2001 | Application #: | 9561546 | Filing Dt: | 4/28/2000 |
| | Title: System for high efficiency motor control | | | | | | | |
| 24 | Patent #: | <u>6366049</u> | Issue Dt: | 4/2/2002 | Application #: | 9567592 | Filing Dt: | 5/10/2000 |
| | Title: Motor starter and speed controller system | | | | | | | |
| 25 | Patent #: | <u>6178103</u> | Issue Dt: | 1/23/2001 | Application #: | 9567965 | Filing Dt: | 5/10/2000 |
| | Title: Method and circuit for synchronizing parallel voltage source inverters | | | | | | | |
| 26 | Patent #: | <u>6212085</u> | Issue Dt: | 4/3/2001 | Application #: | 9593613 | Filing Dt: | 6/13/2000 |
| | Title: Integrated dual voltage sourced inverter | | | | | | | |
| 27 | Patent #: | <u>6362988</u> | Issue Dt: | 3/26/2002 | Application #: | 9606865 | Filing Dt: | 6/29/2000 |
| | Title: OPERATION WITH A GRID | | | | | | | |
| 28 | Patent #: | <u>6239997</u> | Issue Dt: | 5/29/2001 | Application #: | 9653478 | Filing Dt: | 9/1/2000 |
| | Title: Method and system for connecting and synchronizing a supplemental power source to a power grid | | | | | | | |
| 29 | Patent #: | <u>6388419</u> | Issue Dt: | 5/14/2002 | Application #: | 9653654 | Filing Dt: | 9/1/2000 |
| | Title: Motor control system | | | | | | | |
| 30 | Patent #: | <u>6572416</u> | Issue Dt: | 6/3/2003 | Application #: | 9682976 | Filing Dt: | 11/5/2001 |
| | Publication #: | <u>US20030087560</u> | Pub Dt: | 5/8/2003 | | | | |
| | Title: THREE-PHASE CONNECTOR FOR ELECTRIC VEHICLE DRIVETRAIN | | | | | | | |
| 31 | Patent #: | <u>6646837</u> | Issue Dt: | 11/11/2003 | Application #: | 9682994 | Filing Dt: | 11/6/2001 |
| | Publication #: | <u>US20020190580</u> | Pub Dt: | 12/19/2002 | | | | |
| | Title: ACTIVE GROUND CURRENT REDUCTION DEVICE | | | | | | | |
| 32 | Patent #: | <u>6744158</u> | Issue Dt: | 6/1/2004 | Application #: | 9683018 | Filing Dt: | 11/8/2001 |
| | Publication #: | <u>US20020089244</u> | Pub Dt: | 7/11/2002 | | | | |
| | Title: ELECTRIC MACHINE WITH COOLING RINGS | | | | | | | |
| 33 | Patent #: | <u>6631960</u> | Issue Dt: | 10/14/2003 | Application #: | 9683171 | Filing Dt: | 11/28/2001 |
| | Publication #: | <u>US20030132664</u> | Pub Dt: | 7/17/2003 | | | | |
| | Title: SERIES REGENERATIVE BRAKING TORQUE CONTROL SYSTEMS AND METHODS | | | | | | | |
| 34 | Patent #: | <u>6498393</u> | Issue Dt: | 12/17/2002 | Application #: | 9683172 | Filing Dt: | 11/28/2001 |
| | Title: INTEGRATED TRACTION INVERTER MODULE AND BI-DIRECTIONAL DC/DC CONVERTER | | | | | | | |
| 35 | Patent #: | <u>6465977</u> | Issue Dt: | 10/15/2002 | Application #: | 9683176 | Filing Dt: | 11/29/2001 |



United States Patent and Trademark Office

Patent Assignment Details

NOTE: Results display only for issued patents and published applications. For pending or abandoned applications please consult USPTO staff.

Reel/Frame: 019077/0840

Pages: 7

Recorded: 3/28/2007

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

Total properties: 104

Title: SYSTEM AND METHOD FOR CONTROLLING TORQUE IN AN ELECTRICAL MACHINE

36 Patent #: 6630809 Issue Dt: 10/7/2003 Application #: 9683180 Filing Dt: 11/29/2001
Publication #: US20030098665 Pub Dt: 5/29/2003

Title: SYSTEM AND METHOD FOR INDUCTION MOTOR CONTROL

37 Patent #: 6639334 Issue Dt: 10/28/2003 Application #: 9683199 Filing Dt: 11/30/2001
Publication #: US20030102728 Pub Dt: 6/5/2003

Title: JET IMPINGEMENT COOLING OF ELECTRIC MOTOR END-WINDINGS

38 Patent #: 6452352 Issue Dt: 9/17/2002 Application #: 9705236 Filing Dt: 11/2/2000
Title: CURRENT GENERATING SYSTEM

39 Patent #: 6445095 Issue Dt: 9/3/2002 Application #: 9758871 Filing Dt: 1/11/2001
Publication #: US20020089242 Pub Dt: 7/11/2002

Title: ELECTRIC MACHINE WITH LAMINATED COOLING RINGS

40 Patent #: 6636429 Issue Dt: 10/21/2003 Application #: 9957001 Filing Dt: 9/20/2001
Publication #: US20020126465 Pub Dt: 9/12/2002

Title: LEVEL

41 Patent #: 6793502 Issue Dt: 9/21/2004 Application #: 9957047 Filing Dt: 9/20/2001
Publication #: US20020111050 Pub Dt: 8/15/2002

Title: PRESS (NON-SOLDERED) CONTACTS FOR HIGH CURRENT ELECTRICAL CONNECTIONS IN POWER MODULES

42 Patent #: 6845017 Issue Dt: 1/18/2005 Application #: 9957568 Filing Dt: 9/20/2001
Publication #: US20020118560 Pub Dt: 8/29/2002

Title: SUBSTRATE-LEVEL DC BUS DESIGN TO REDUCE MODULE INDUCTANCE

43 Patent #: 6707270 Issue Dt: 3/16/2004 Application #: 10010307 Filing Dt: 11/13/2001
Publication #: US20030090226 Pub Dt: 5/15/2003

Title: SYSTEM AND METHOD FOR INDUCTION MOTOR CONTROL

44 Patent #: 7012810 Issue Dt: 3/14/2006 Application #: 10109555 Filing Dt: 3/27/2002
Publication #: US20020167828 Pub Dt: 11/14/2002

Title: LEADFRAME-BASED MODULE DC BUS DESIGN TO REDUCE MODULE INDUCTANCE

45 Patent #: 6919650 Issue Dt: 7/19/2005 Application #: 10159603 Filing Dt: 5/31/2002
Publication #: US20030222507 Pub Dt: 12/4/2003

Title: HYBRID SYNCHRONIZATION PHASE ANGLE GENERATION METHOD

46 Patent #: 6700342 Issue Dt: 3/2/2004 Application #: 10208251 Filing Dt: 7/29/2002
Publication #: US20030030395 Pub Dt: 2/13/2003

Title: LIMITED POSITION INFORMATION

47 Patent #: 6815925 Issue Dt: 11/9/2004 Application #: 10293911 Filing Dt: 11/12/2002
Publication #: US20040090205 Pub Dt: 5/13/2004

Title: SYSTEMS AND METHODS FOR ELECTRIC MOTOR CONTROL

48 Patent #: 6778411 Issue Dt: 8/17/2004 Application #: 10298473 Filing Dt: 11/18/2002
Publication #: US20040095786 Pub Dt: 5/20/2004

Title: STARTUP APPARATUS AND METHOD FOR POWER CONVERTERS



United States Patent and Trademark Office

Patent Assignment Details

NOTE: Results display only for issued patents and published applications. For pending or abandoned applications please consult USPTO staff.

Reel/Frame: 019077/0840

Pages: 7

Recorded: 3/28/2007

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

Total properties: 104

| | | | | | | | | |
|----|---|----------------------|-----------|------------|----------------|----------|------------|------------|
| 49 | Patent #: | <u>6714424</u> | Issue Dt: | 3/30/2004 | Application #: | 10306833 | Filing Dt: | 11/27/2002 |
| | Publication #: | <u>US20040037097</u> | Pub Dt: | 2/26/2004 | | | | |
| | Title: DEAD-TIME COMPENSATION WITH NARROW PULSE ELIMINATION IN SOLID-STATE SWITCH DEVICES | | | | | | | |
| 50 | Patent #: | <u>6861835</u> | Issue Dt: | 3/1/2005 | Application #: | 10309793 | Filing Dt: | 12/3/2002 |
| | Publication #: | <u>US20040104718</u> | Pub Dt: | 6/3/2004 | | | | |
| | Title: METHOD AND SYSTEM FOR NON-INVASIVE POWER TRANSISTOR DIE VOLTAGE MEASUREMENT | | | | | | | |
| 51 | Patent #: | <u>7106564</u> | Issue Dt: | 9/12/2006 | Application #: | 10328934 | Filing Dt: | 12/23/2002 |
| | Publication #: | <u>US20030147191</u> | Pub Dt: | 8/7/2003 | | | | |
| | Title: DEVICES AND METHODS FOR DETECTING ISLANDING OPERATION OF A STATIC POWER SOURCE | | | | | | | |
| 52 | Patent #: | <u>7190145</u> | Issue Dt: | 3/13/2007 | Application #: | 10334198 | Filing Dt: | 12/30/2002 |
| | Publication #: | <u>US20030164692</u> | Pub Dt: | 9/4/2003 | | | | |
| | Title: METHOD AND APPARATUS FOR IMPROVING SPEED MEASUREMENT QUALITY IN MULTI-POLE MACHINES | | | | | | | |
| 53 | Patent #: | <u>6914354</u> | Issue Dt: | 7/5/2005 | Application #: | 10334820 | Filing Dt: | 12/30/2002 |
| | Publication #: | <u>US20030173840</u> | Pub Dt: | 9/18/2003 | | | | |
| | Title: ASSEMBLY AND METHOD FOR DIRECT COOLING OF MOTOR END-WINDING | | | | | | | |
| 54 | Patent #: | <u>6853940</u> | Issue Dt: | 2/8/2005 | Application #: | 10345871 | Filing Dt: | 1/15/2003 |
| | Publication #: | <u>US20030165036</u> | Pub Dt: | 9/4/2003 | | | | |
| | Title: ANTI-ISLANDING DEVICE AND METHOD FOR GRID CONNECTED INVERTERS USING RANDOM NOISE INJECTION | | | | | | | |
| 55 | Patent #: | <u>6844701</u> | Issue Dt: | 1/18/2005 | Application #: | 10345872 | Filing Dt: | 1/15/2003 |
| | Publication #: | <u>US20030164028</u> | Pub Dt: | 9/4/2003 | | | | |
| | Title: OVERMODULATION SYSTEMS AND METHODS FOR INDUCTION MOTOR CONTROL | | | | | | | |
| 56 | Patent #: | <u>6937483</u> | Issue Dt: | 8/30/2005 | Application #: | 10345894 | Filing Dt: | 1/15/2003 |
| | Publication #: | <u>US20030198064</u> | Pub Dt: | 10/23/2003 | | | | |
| | Title: DEVICE AND METHOD OF COMMUTATION CONTROL FOR AN ISOLATED BOOST CONVERTER | | | | | | | |
| 57 | Patent #: | <u>6843749</u> | Issue Dt: | 1/18/2005 | Application #: | 10346554 | Filing Dt: | 1/16/2003 |
| | Publication #: | <u>US20030155165</u> | Pub Dt: | 8/21/2003 | | | | |
| | Title: APPARATUS AND METHOD TO ACHIEVE MULTIPLE EFFECTIVE RATIOS FROM A FIXED RATIO TRANSAXLE | | | | | | | |
| 58 | Patent #: | <u>7014928</u> | Issue Dt: | 3/21/2006 | Application #: | 10346561 | Filing Dt: | 1/16/2003 |
| | Publication #: | <u>US20030157379</u> | Pub Dt: | 8/21/2003 | | | | |
| | Title: DIRECT CURRENT/DIRECT CURRENT CONVERTER FOR A FUEL CELL SYSTEM | | | | | | | |
| 59 | Patent #: | <u>6894450</u> | Issue Dt: | 5/17/2005 | Application #: | 10346724 | Filing Dt: | 1/16/2003 |
| | Publication #: | <u>US20030214266</u> | Pub Dt: | 11/20/2003 | | | | |
| | Title: CIRCUIT CONFIGURATION FOR PERMANENT MAGNET SYNCHRONOUS MOTOR CONTROL | | | | | | | |
| 60 | Patent #: | <u>7012822</u> | Issue Dt: | 3/14/2006 | Application #: | 10360832 | Filing Dt: | 2/7/2003 |
| | Publication #: | <u>US20030214826</u> | Pub Dt: | 11/20/2003 | | | | |
| | Title: INTEGRATED TRACTION INVERTER MODULE AND DC/DC CONVERTER | | | | | | | |
| 61 | Patent #: | <u>6890218</u> | Issue Dt: | 5/10/2005 | Application #: | 10443646 | Filing Dt: | 5/21/2003 |
| | Publication #: | <u>US20040033729</u> | Pub Dt: | 2/19/2004 | | | | |
| | Title: THREE-PHASE CONNECTOR FOR ELECTRIC VEHICLE DRIVETRAIN | | | | | | | |



United States Patent and Trademark Office

Patent Assignment Details

NOTE: Results display only for issued patents and published applications. For pending or abandoned applications please consult USPTO staff.

Reel/Frame: 019077/0840

Pages: 7

Recorded: 3/28/2007

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

Total properties: 104

| | | | | | | | | |
|----|----------------|---|-----------|------------|----------------|----------|------------|------------|
| 62 | Patent #: | <u>6927988</u> | Issue Dt: | 8/9/2005 | Application #: | 10447708 | Filing Dt: | 5/28/2003 |
| | Publication #: | <u>US20040034508</u> | Pub Dt: | 2/19/2004 | | | | |
| | Title: | CONVERTER CIRCUITS | | | | | | |
| 63 | Patent #: | <u>6936991</u> | Issue Dt: | 8/30/2005 | Application #: | 10449824 | Filing Dt: | 5/30/2003 |
| | Publication #: | <u>US20040036434</u> | Pub Dt: | 2/26/2004 | | | | |
| | Title: | METHOD AND APPARATUS FOR MOTOR CONTROL | | | | | | |
| 64 | Patent #: | <u>6845020</u> | Issue Dt: | 1/18/2005 | Application #: | 10453920 | Filing Dt: | 6/2/2003 |
| | Publication #: | <u>US20040027839</u> | Pub Dt: | 2/12/2004 | | | | |
| | Title: | POWER CONVERTER SYSTEM | | | | | | |
| 65 | Patent #: | <u>6867987</u> | Issue Dt: | 3/15/2005 | Application #: | 10461933 | Filing Dt: | 6/13/2003 |
| | Publication #: | <u>US20040252531</u> | Pub Dt: | 12/16/2004 | | | | |
| | Title: | MULTILEVEL INVERTER CONTROL SCHEMES | | | | | | |
| 66 | Patent #: | <u>6900643</u> | Issue Dt: | 5/31/2005 | Application #: | 10637754 | Filing Dt: | 8/6/2003 |
| | Publication #: | <u>US20050030045</u> | Pub Dt: | 2/10/2005 | | | | |
| | Title: | RIDE THROUGH IN ELECTRONIC POWER CONVERTERS | | | | | | |
| 67 | Patent #: | <u>6906404</u> | Issue Dt: | 6/14/2005 | Application #: | 10642391 | Filing Dt: | 8/14/2003 |
| | Publication #: | <u>US20040227231</u> | Pub Dt: | 11/18/2004 | | | | |
| | Title: | POWER MODULE WITH VOLTAGE OVERSHOOT LIMITING | | | | | | |
| 68 | Patent #: | <u>6987670</u> | Issue Dt: | 1/17/2006 | Application #: | 10642424 | Filing Dt: | 8/14/2003 |
| | Publication #: | <u>US20040228094</u> | Pub Dt: | 11/18/2004 | | | | |
| | Title: | DUAL POWER MODULE POWER SYSTEM ARCHITECTURE | | | | | | |
| 69 | Patent #: | <u>7058755</u> | Issue Dt: | 6/6/2006 | Application #: | 10658124 | Filing Dt: | 9/9/2003 |
| | Publication #: | <u>US20050055496</u> | Pub Dt: | 3/10/2005 | | | | |
| | Title: | EEPROM EMULATION IN FLASH MEMORY | | | | | | |
| 70 | Patent #: | NONE | Issue Dt: | | Application #: | 10658804 | Filing Dt: | 9/9/2003 |
| | Publication #: | <u>US20060274561</u> | Pub Dt: | 12/7/2006 | | | | |
| | Title: | Tri-level inverter | | | | | | |
| 71 | Patent #: | NONE | Issue Dt: | | Application #: | 10664808 | Filing Dt: | 9/17/2003 |
| | Publication #: | <u>US20040230847</u> | Pub Dt: | 11/18/2004 | | | | |
| | Title: | Power converter architecture employing at least one capacitor across a DC bus | | | | | | |
| 72 | Patent #: | <u>7019996</u> | Issue Dt: | 3/28/2006 | Application #: | 10688834 | Filing Dt: | 10/16/2003 |
| | Publication #: | <u>US20050083714</u> | Pub Dt: | 4/21/2005 | | | | |
| | Title: | POWER CONVERTER EMPLOYING A PLANAR TRANSFORMER | | | | | | |
| 73 | Patent #: | NONE | Issue Dt: | | Application #: | 10713552 | Filing Dt: | 11/14/2003 |
| | Publication #: | <u>US20050105229</u> | Pub Dt: | 5/19/2005 | | | | |
| | Title: | Two-level protection for uninterrupted power supply | | | | | | |
| 74 | Patent #: | <u>6940735</u> | Issue Dt: | 9/6/2005 | Application #: | 10713767 | Filing Dt: | 11/14/2003 |
| | Publication #: | <u>US20050105306</u> | Pub Dt: | 5/19/2005 | | | | |
| | Title: | POWER CONVERTER SYSTEM | | | | | | |



United States Patent and Trademark Office

Patent Assignment Details

NOTE: Results display only for issued patents and published applications. For pending or abandoned applications please consult USPTO staff.

Reel/Frame: 019077/0840

Pages: 7

Recorded: 3/28/2007

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

Total properties: 104

| | | | | | | | | |
|-----|---|----------------------|-----------|------------|----------------|----------|------------|------------|
| 88 | Patent #: | <u>7046535</u> | Issue Dt: | 5/16/2006 | Application #: | 11003542 | Filing Dt: | 12/3/2004 |
| | Publication #: | <u>US20050152100</u> | Pub Dt: | 7/14/2005 | | | | |
| | Title: ARCHITECTURE FOR POWER MODULES SUCH AS POWER INVERTERS | | | | | | | |
| 89 | Patent #: | NONE | Issue Dt: | | Application #: | 11010560 | Filing Dt: | 12/13/2004 |
| | Publication #: | <u>US20050152101</u> | Pub Dt: | 7/14/2005 | | | | |
| | Title: Architecture for power modules such as power inverters | | | | | | | |
| 90 | Patent #: | NONE | Issue Dt: | | Application #: | 11010561 | Filing Dt: | 12/13/2004 |
| | Publication #: | <u>US20050162875</u> | Pub Dt: | 7/28/2005 | | | | |
| | Title: Architecture for power modules such as power inverters | | | | | | | |
| 91 | Patent #: | NONE | Issue Dt: | | Application #: | 11010950 | Filing Dt: | 12/13/2004 |
| | Publication #: | <u>US20060007721</u> | Pub Dt: | 1/12/2006 | | | | |
| | Title: Architecture for power modules such as power inverters | | | | | | | |
| 92 | Patent #: | NONE | Issue Dt: | | Application #: | 11095035 | Filing Dt: | 3/30/2005 |
| | Publication #: | <u>US20050253543</u> | Pub Dt: | 11/17/2005 | | | | |
| | Title: Method, apparatus and article for vibration compensation in electric drivetrains | | | | | | | |
| 93 | Patent #: | NONE | Issue Dt: | | Application #: | 11096236 | Filing Dt: | 3/30/2005 |
| | Publication #: | <u>US20050254273</u> | Pub Dt: | 11/17/2005 | | | | |
| | Title: Method, apparatus and article for bi-directional DC/DC power conversion | | | | | | | |
| 94 | Patent #: | NONE | Issue Dt: | | Application #: | 11192321 | Filing Dt: | 7/28/2005 |
| | Publication #: | <u>US20060022541</u> | Pub Dt: | 2/2/2006 | | | | |
| | Title: Rotor hub and assembly for a permanent magnet power electric machine | | | | | | | |
| 95 | Patent #: | <u>7187558</u> | Issue Dt: | 3/6/2007 | Application #: | 11245723 | Filing Dt: | 10/6/2005 |
| | Publication #: | <u>US20060028806</u> | Pub Dt: | 2/9/2006 | | | | |
| | Title: LEADFRAME-BASED MODULE DC BUS DESIGN TO REDUCE MODULE INDUCTANCE | | | | | | | |
| 96 | Patent #: | NONE | Issue Dt: | | Application #: | 11250180 | Filing Dt: | 10/12/2005 |
| | Publication #: | <u>US20070080655</u> | Pub Dt: | 4/12/2007 | | | | |
| | Title: Method, apparatus and article for detecting rotor position | | | | | | | |
| 97 | Patent #: | NONE | Issue Dt: | | Application #: | 11255162 | Filing Dt: | 10/20/2005 |
| | Publication #: | <u>US20060152085</u> | Pub Dt: | 7/13/2006 | | | | |
| | Title: Power system method and apparatus | | | | | | | |
| 98 | Patent #: | NONE | Issue Dt: | | Application #: | 11262519 | Filing Dt: | 10/27/2005 |
| | Publication #: | <u>US20070097569</u> | Pub Dt: | 5/3/2007 | | | | |
| | Title: System and method of over voltage control for a power system | | | | | | | |
| 99 | Patent #: | NONE | Issue Dt: | | Application #: | 11282301 | Filing Dt: | 11/18/2005 |
| | Publication #: | <u>US20070114954</u> | Pub Dt: | 5/24/2007 | | | | |
| | Title: System and method of commonly controlling power converters | | | | | | | |
| 100 | Patent #: | <u>7193860</u> | Issue Dt: | 3/20/2007 | Application #: | 11292870 | Filing Dt: | 12/2/2005 |
| | Publication #: | <u>US20060082983</u> | Pub Dt: | 4/20/2006 | | | | |
| | Title: LEADFRAME-BASED MODULE DC BUS DESIGN TO REDUCE MODULE INDUCTANCE | | | | | | | |



United States Patent and Trademark Office

Patent Assignment Details

NOTE: Results display only for issued patents and published applications. For pending or abandoned applications please consult USPTO staff.

Reel/Frame: 019077/0840

Recorded: 3/28/2007

Pages: 7

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

Total properties: 104

| | | | |
|-----|--|--------------------------------|--|
| 101 | Patent #: NONE Publication #: <u>US20070147097</u> Title: house keeping power supply | Issue Dt: Pub Dt: 6/28/2007 | Application #: 11317658 Filing Dt: 12/22/2005 |
| 102 | Patent #: NONE Publication #: <u>US20060099463</u> Title: Direct current/direct current converter for a fuel cell system | Issue Dt: Pub Dt: 5/11/2006 | Application #: 11318166 Filing Dt: 12/23/2005 |
| 103 | Patent #: NONE Publication #: <u>US20070012492</u> Title: Power generation system suitable for hybrid electric vehicles | Issue Dt: Pub Dt: 1/18/2007 | Application #: 11472486 Filing Dt: 6/20/2006 |
| 104 | Patent #: NONE Publication #: <u>US20070016340</u> Title: Controller method, apparatus and article suitable for electric drive | Issue Dt: Pub Dt: 1/18/2007 | Application #: 11480311 Filing Dt: 6/29/2006 |

Assignor

1 BALLARD POWER SYSTEMS CORPORATION

Assignee

1 SIEMENS VDO AUTOMOTIVE CORPORATION
2400 EXECUTIVE HILLS BLVD.
AUBURN HILLS, MICHIGAN 48326-2980

Correspondence name and address

ELSA KELLER
SIEMENS CORPORATION INTELLECTUAL ET AL
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

Search Results as of: 07/10/2007 02:11 PM

If you have any comments or questions concerning the data displayed, contact PRD / Assignments at 571-272-3350 v.2.0.1

Web interface last modified: April 20, 2007 v.2.0.1